

## Abstract

A method and device are provided for determining a intraperitoneal volume during peritoneal dialysis. The method and device can be used in conjunction with a dialysis machine wherein a first circuit peritoneal solution from a patient's peritoneal cavity is carried past one side of a semipermeable membrane and dialyzing fluid in a second circuit is carried past the other side of the membrane. The concentration of an endogenous substance (which during peritoneal dialysis passes through the peritoneum into the peritoneal cavity) is measured during the treatment. The intraperitoneal volume is calculated from the measured variation in concentration of the endogenous substance in the peritoneal solution. Preferably, the endogenous substance is albumin. The concentration of the endogenous substance preferably is measured at two successive times. After the first measurement, a predetermined volume of fluid  $\Delta V$  is withdrawn from or added to the first circuit.